



JAN 3 0 2014

Mr. Timothy Nishikubo Chevron U.S.A. P.O. Box 1392 Bakersfield, CA 93302

Re: Notice of Minor Title V Permit Modification

District Facility # S-1127 & S-1311 Project # S-1133418 & S-1133420

Dear Mr. Nishikubo:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-1127-69-31, S-1131-78-28 and 6-877-21 into the Title V operating permit. The permits authorized modification of 62.5 MMBtu/hr natural gas/vapor recovery gas-fired steam generators by transfering their location to NW/4 Section 5, Township 29S, Range 28E and upgrading their convection and radiant sections.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-1127-69-31, S-1131-78-28 and '-877-21, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely.

Director of Permit Services

**Enclosures** 

Gerardo C. Rios, EPA (w/enclosure) via email CC:

Seved Sadredin

Executive Director/Air Pollution Control Officer

Southern Region

### TITLE V APPLICATION REVIEW

Minor Modification
Project #'s: S-1133418 & S-1133420

Engineer: Robert Rinaldi Date: January 23, 2014

Facility Number: S-1127 & S-1131 Facility Name: Chevron U.S.A. Mailing Address: P.O. Box 1392

Bakersfield, CA 93302

Contact Name: Timothy Nishikubo

Phone: (661) 654-7141

Responsible Official: Timothy Nishikubo

Title: Kern River Operations Supervisor

#### I. PROPOSAL

Chevron U.S.A. is proposing a Title V minor permit modification to incorporate the recently issued ATC's S-1127-69-31, S-1131-78-28 and '-877-21 into the Title V operating permit.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

#### II. FACILITY LOCATION

Heavy Oil Central Source in Kern County at NW/4 Section 5, Township 29S, Range 28E.

Chevron
Facilities S-1127 & S-1131
Project #'s S-1133418 & S-1133420

#### III. EQUIPMENT DESCRIPTION

#### ATC S-1127-69-31:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (81-4, DIS# 43013-82) WITH NORTH AMERICAN GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM: TRANSFER OF LOCATION OF A STEAM GENERATOR TO NW/4 SEC. 5, TOWNSHIP 29S, RANGE 28E AND UPGRADE TO CONVECTION AND RADIANT SECTION

#### ATC S-1131-78-28:

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-69; DIS# 20610-79) WITH A NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (CANFIELD LEASE): TRANSFER OF LOCATION OF STEAM GENERATOR TO NW/4 SEC. 5, TOWNSHIP 29S, RANGE 28E AND UPGRADE TO CONVECTION AND RADIANT SECTION

#### ATC S-1131-877-21:

MODIFICATION OF 62.5 MM BTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR #46 WITH FGR, NORTH AMERICAN MODEL GLE 4231 BURNER AND O2 CONTROLLER (CENTRAL PLANT): TRANSFER OF LOCATION OF A STEAM GENERATOR TO NW/4 SEC. 5, TOWNSHIP 29S, RANGE 28E AND UPGRADE TO CONVECTION AND RADIANT SECTION

#### IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

#### V. APPLICABLE REQUIREMENTS

District Rule 2520, <u>Federally Mandated Operating Permits</u> (Adopted June 21, 2001)

#### VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Only the location will be modified to Heavy Oil Central Source in Kern County at NW/4 Section 5, Township 29S, Range 28E on all three permit units.

#### VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

- 1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
- 2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions:
- 3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- 4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
- Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
- 6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

- 1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- 2. The source's suggested draft permit; and
- 3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

Chevron Facilities S-1127 & S-1131 Project #'s S-1133418 & S-1133420

### **VIII. ATTACHMENTS**

- Α. Proposed Title V Operating Permit
- Existing Title V Permit
  Authority to Construct
  Emissions Increases B.
- C.
- D.
- E. Application
- F. Compliance Certification Form

# ATTACHMENT A

Proposed Modified Title V Operating Permit No.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1127-69-33

SECTION: NW05 TOWNSHIP: 29S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (81-4, DIS# 43013-82) WITH

NORTH AMERICAN GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM

# PERMIT UNIT REQUIREMENTS

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel source and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 3. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
- 5. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2520 and 4320]
- 6. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, D 6228, double GC for H2S and mercaptans, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
- 7. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance is demonstrated for 8 consecutive weeks. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
- 8. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3-2, 4305] 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC Location: HEAVY OIL CENTRAL 8-1127-69-33: Jan 27 2014 11:56AM -- RINALDIR

- 10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Last Amended December 17, 1992), 4301 (Last Amended December 17, 1992), 4305 sections 4.2, 5.1, 5.5.1, 5.5.2, 6.1.1, 6.2 (except 6.2.3), 6.3.1, 6.3.2, and 8.1 (Last Amended December 17, 1992), and 4351, sections 4.2, 5.2.2, 6.1.1, 6.2, and 8.1 (Last Amended October 19, 1995). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 11. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 12. Emission rates shall not exceed any of the following PM10: 0.014 lb/MMBtu, or VOC: 0.003 lb/MMBtu. [District Rules 2201, 4305 and 4320] Federally Enforceable Through Title V Permit
- 13. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmvd @ 3% O2, or CO: 0.021 lb/MMBtu or 28 ppmvd @ 3% O2. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5 grains S/100 scf. [District Rule 4320]
- 15. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods exceeding 2 hours. [District Rules 4305, 5.5.6, 4306, 5.3 and 4320] Federally Enforceable Through Title V Permit
- 16. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4306, 3.25 and 3.22 and 4320] Federally Enforceable Through Title V Permit
- 17. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 4320]
- 18. Vapor recovery gas sulfur analysis and heating value determination shall be conducted by a District-approved independent laboratory on an annual basis. Sample collection for such determination shall be District-witnessed or approved. [District Rules 1081, 7.2 and 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 19. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit
- 20. NOx and CO emissions shall be measured with annual source testing conducted by an independent testing laboratory and shall be witnessed or authorized by the District [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of duration of each start-up and shutdown for a period of five years and make such records readily available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
- 24. Permittee shall keep weekly records of the sulfur content of the vapor recovery gas, amount of natural gas combusted, and the amount of vapor recovery gas combusted. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMITUNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC Location: HEAVY OIL CENTRAL 8-1127-69-93: Jan 27 2014 11:56AM - RINALDIR

- 25. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003) shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 27. The Regional Administrator shall be notified in writing within (15) days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in Section VIII of Federal Permit SJ 80-14 (as amended August 15, 2003). This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Section VIII of Federal Permit SJ 80-14 (as amended August 15, 2003), and the methods utilized to restore normal operations. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 28. The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local air pollution control agency, and/or their authorized representatives, upon the presentation of credentials, shall be permitted: A) to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003); and B) at reasonable times to have access to and copy any records required to be kept under the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003); and C) to inspect any equipment, operation, or method required in Federal Permit SJ 80-14 (as amended August 15, 2003); and D) to sample emissions from the source. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 29. In the event of any changes in control or ownership of facilities, Federal Permit SJ 80-14 (as amended August 15, 2003) shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of Federal Permit SJ 80-14 (as amended August 15, 2003) and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 30. The provisions of Federal Permit SJ 80-14 (as amended August 15, 2003) are severable, and, if any provision of amended Federal Permit SJ 80-14 is held invalid, the remainder of amended Federal Permit SJ 80-14 shall not be affected thereby. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 31. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable Federal, State and local regulations. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 32. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320]
- 33. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]

PERMITUNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC Location: HEAVY OIL CENTRAL 8-1127-69-33: Jan 27 2014 11:56AM - RINALDIR

- 34. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]
- 35. {4066} The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
- 36. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 37. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, stack gas velocities EPA Method 2, and stack gas moisture content EPA Method 4. [District Rules 1081, 4305, 4320 and 4351] Federally Enforceable Through Title V Permit
- 38. Permittee shall maintain records of fuel hhv and cumulative annual fuel use for a period of 5 years and shall make such records readily available for District inspection upon request. [District Rule 4351] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC Location: HEAVY OIL CENTRAL S-1127-69-33 . Jan 27 2014 11:56AM -- RINALDIR

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1131-78-29

SECTION: NW05 TOWNSHIP: 29S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-69; DIS# 20610-79) WITH A NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (CANFIELD LEASE)

### PERMIT UNIT REQUIREMENTS

- The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
- Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- Except during startup and shutdown, emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,855 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS part of the Facility-wide Permit to Operate. These terms and conditions

Facility Name: CHEVRON USA INC

Location: HEAVY OIL CENTRAL, KERN COUNTY, CA s-1131-78-29: Jan 23 2014 4:56PM--RINALDIR Location:

- 10. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
- 12. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 16. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit

PERMITUNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC Location: HEAVY OIL CENTRAL, KERN COUNTY, CA 8-1131-78-29: Jan 23 2014 4:56PM -- RINALDIR

- 20. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, stack gas velocities EPA Method 2, stack gas moisture EPA Method 4, PM10 EPA Method 5 (both filterable and condensible), SOx (lb/MMBtu) EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H2S) EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H2S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320]
- 23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NOx and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 27. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 30. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 31. {4194} Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

PERMITURIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC Location: HEAVY OIL CENTRAL, KERN COUNTY, CA S-1131-78-29: Jan 23 2014 4:56PM - RINALDIR 32. {4314} Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC Location: HEAVY OIL CENTRAL, KERN COUNTY, CA 8-1131-78-29: Jan 23 2014 4:58PM -- RINALDIR

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1131-877-22

SECTION: NW05 TOWNSHIP: 29S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

62.5 MM BTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR #46 WITH FGR, NORTH AMERICAN MODEL GLE 4231 BURNER AND O2 CONTROLLER (CENTRAL PLANT)

# PERMIT UNIT REQUIREMENTS

- 1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
- The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
- Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed any of the following limits: 0.0768 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Except during startup and shutdown, emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 28 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,855 lb-NOx/year, 0.084 lb-CO/MMBtu, 31.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS ÇÕNTÍNŲE ON NEXT PAGE are part-of the Facility-wide Permit to Operate. These terms and conditions

Facility Name: CHEVRON USA INC Cation: HEAVY OIL CENTRAL, KERN COUNTY, CA 31-877-22: Jan 27 2014 12:00PM - RINALDIR Location:

- 12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 15. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 16. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 17. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
- 18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 19. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit

PERMITURIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

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Facility Name: CHEVRON USA INC

- 22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320] Federally Enforceable Through Title V Permit
- 25. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 26. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, stack gas velocities EPA Method 2, stack gas moisture EPA Method 4, PM10 EPA Method 5 (both filterable and condensible), SOx (lb/MMBtu) EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H2S) EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H2S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 27. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 28. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NOx and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration [District Rules 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 31. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 33. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit

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These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: CHEVRON USA INC
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- 34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 35. {1669} This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 36. Formerly S-1143-3.
- 37. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 38. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

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Facility Name: CHEVRON USA INC
Location: HEAVY OIL CENTRAL, KERN COUNTY, CA
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# ATTACHMENT B

Existing Title V Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1127-69-27

**EXPIRATION DATE: 02/29/2016** 

SECTION: 04 TOWNSHIP: 29S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (81-4, DIS# 43013-82) WITH NORTH AMERICAN GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM

## PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
- 2. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit
- 3. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, D 6228, double GC for H2S and mercaptans, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit
- 4. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance is demonstrated for 8 consecutive weeks. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit
- 5. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
- 6. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 4305, and 4351] Federally Enforceable Through Title V Permit
- 7. Vapor recovery gas sulfur analysis and heating value determination shall be conducted by a District-approved independent laboratory on an annual basis. Sample collection for such determination shall be District-witnessed or approved. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
- 8. Permittee shall keep weekly records of the sulfur content of the vapor recovery gas, amount of natural gas combusted, and the amount of vapor recovery gas combusted. [District Rule 1070 and 2520] Federally Enforceable Through Title V Permit

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- 9. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel source and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520] Federally Enforceable Through Title V Permit
- 10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Last Amended December 17, 1992) and 4301 (Last Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 11. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 12. Emissions shall not exceed any of the following limits: PM10: 0.014 lb/MMBtu, or VOC: 0.003 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Except during start-up and shutdown periods, emissions shall not exceed any of the following limits: NOx as NO2: 15 ppmvd @ 3% O2 or 0.0182 lb-NOx/MMBtu, or CO: 29 ppmvd @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 14. During start-up and shutdown periods, emissions shall not exceed: NOx as NO2: 0.1 lb/MMBtu, or CO: 0.084 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: NOx as NO2: 54.0 lb/day, or CO: 31.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods exceeding 2 hours. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 17. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 18. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5 grains S/100 scf. [District Rule 4320] Federally Enforceable Through Title V Permit
- 19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 20. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

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- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 23. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
- 25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
- 26. Source sampling to determine the compliance status of an emissions source shall be witnessed or authorized by District personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 29. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 30. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, and 4306] Federally Enforceable Through Title V Permit
- 31. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or 10B or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, stack gas moisture content EPA Method 4, and stack gas velocities EPA Method 2. [District Rules 1081, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
- 32. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx and CO emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rules 2520, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

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- 33. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
- 34. All units in a group for which representative units are source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
- 35. All units in a group for which representative units are source tested to demonstrate compliance for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
- 36. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 2520, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
- 37. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003) shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 38. The Regional Administrator shall be notified in writing within (15) days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in Section VIII of Federal Permit SJ 80-14 (as amended August 15, 2003). This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Section VIII of Federal Permit SJ 80-14 (as amended August 15, 2003), and the methods utilized to restore normal operations. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 39. The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local air pollution control agency, and/or their authorized representatives, upon the presentation of credentials, shall be permitted: A) to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003); and B) at reasonable times to have access to and copy any records required to be kept under the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003); and C) to inspect any equipment, operation, or method required in Federal Permit SJ 80-14 (as amended August 15, 2003); and D) to sample emissions from the source. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 40. In the event of any changes in control or ownership of facilities, Federal Permit SJ 80-14 (as amended August 15, 2003) shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of Federal Permit SJ 80-14 (as amended August 15, 2003) and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 41. The provisions of Federal Permit SJ 80-14 (as amended August 15, 2003) are severable, and, if any provision of amended Federal Permit SJ 80-14 is held invalid, the remainder of amended Federal Permit SJ 80-14 shall not be affected thereby. [PSD SJ 80-14] Federally Enforceable Through Title V Permit

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- 42. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable Federal, State and local regulations. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 43. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 44. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 45. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1131-78-25 **EXPIRATION DATE:** 02/28/2017

SECTION: SE29 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-69; DIS# 20610-79) WITH A NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (CANFIELD LEASE)

# PERMIT UNIT REQUIREMENTS

- 1. The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
- 2. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 3. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Except during startup and shutdown, emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 5. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,855 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 7. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 8. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 9. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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- 10. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 11. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
- 12. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 16. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit

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- 20. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM10 - EPA Method 5 (both filterable and condensible), SOx (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H2S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H2S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 43201
- 23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NOx and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 27. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 30. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 31. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

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32. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1131-877-20 **EXPIRATION DATE:** 02/28/2017

SECTION: 04 TOWNSHIP: 29S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

62.5 MM BTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR #46 WITH FGR, NORTH AMERICAN MODEL GLE 4231 BURNER AND O2 CONTROLLER (CENTRAL PLANT)

# PERMIT UNIT REQUIREMENTS

- 1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
- 7. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
- 8. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 9. Emission rates shall not exceed any of the following limits: 0.0768 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Except during startup and shutdown, emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 28 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 11. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,855 lb-NOx/year, 0.084 lb-CO/MMBtu, 31.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit

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- 12. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 13. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 15. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 16. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 17. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
- 18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 19. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V
- 21. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit

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- 22. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320] Federally Enforceable Through Title V Permit
- 25. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 26. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas velocities - EPA Method 2, stack gas moisture - EPA Method 4, PM10 - EPA Method 5 (both filterable and condensible), SOx (lb/MMBtu) - EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H2S) - EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) - ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H2S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 27. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 28. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NOx and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration [District Rules 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 31. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 33. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit

- 34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 35. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 36. Formerly S-1143-3.
- 37. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 38. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

Facility Name: CHEVRON USA INC Location: HEAVY OIL CENTRAL, KERN COUNTY, CA S-1131-877-20. Jan 23 2014 4:29PM - RINALDIR

# ATTACHMENT C

Authority to Construct





**ISSUANCE DATE: 05/06/2013** 

# **AUTHORITY TO CONSTRUCT**

**PERMIT NO:** S-1127-69-31

**MAILING ADDRESS:** 

LEGAL OWNER OR OPERATOR: CHEVRON USA INC

PO BOX 1392

BAKERSFIELD, CA 93302

LOCATION:

**HEAVY OIL CENTRAL** 

SECTION: 04 TOWNSHIP: 29S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (81-4, DIS# 43013-82) WITH NORTH AMERICAN GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (FGR) SYSTEM: TRANSFER OF LOCATION OF A STEAM GENERATOR TO NW S 5, T 29S, R 28E AND UPGRADE TO CONVECTION AND RADIANT SECTION

### CONDITIONS

- 1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- 2. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
- 3. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel source and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 4. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 5. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
- 6. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rules 2520 and 4320]

#### CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

- 7. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired shall be determined using ASTM D 1072, D 3031, D 4084, D 3246, D 6228, double GC for H2S and mercaptans, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
- 8. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance is demonstrated for 8 consecutive weeks. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
- 9. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320]
- 10. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Last Amended December 17, 1992), 4301 (Last Amended December 17, 1992), 4305 sections 4.2, 5.1, 5.5.1, 5.5.2, 6.1.1, 6.2 (except 6.2.3), 6.3.1, 6.3.2, and 8.1 (Last Amended December 17, 1992), and 4351, sections 4.2, 5.2.2, 6.1.1, 6.2, and 8.1 (Last Amended October 19, 1995). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 12. The requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 13. Emission rates shall not exceed any of the following PM10: 0.014 lb/MMBtu, or VOC: 0.003 lb/MMBtu. [District Rules 2201, 4305 and 4320] Federally Enforceable Through Title V Permit
- 14. Emission rates, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 0.018 lb/MMBtu or 15 ppmvd @ 3% O2, or CO: 0.021 lb/MMBtu or 28 ppmvd @ 3% O2. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. The combined sulfur content of all fuels supplied to this steam generator shall not exceed 5 grains S/100 scf. [District Rule 4320]
- 16. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods exceeding 2 hours. [District Rules 4305, 5.5.6, 4306, 5.3 and 4320] Federally Enforceable Through Title V Permit
- 17. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 4306, 3.25 and 3.22 and 4320] Federally Enforceable Through Title V Permit
- 18. During start-up and shutdown periods, emissions from the natural gas/vapor recovery gas-fired steam generator shall not exceed either of the following limits: 0.1 lb-NOx/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 4320]
- 19. Vapor recovery gas sulfur analysis and heating value determination shall be conducted by a District-approved independent laboratory on an annual basis. Sample collection for such determination shall be District-witnessed or approved. [District Rules 1081, 7.2 and 2520, 9.5.1] Federally Enforceable Through Title V Permit

- 20. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit
- 21. NOx and CO emissions shall be measured with annual source testing conducted by an independent testing laboratory and shall be witnessed or authorized by the District [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain records of duration of each start-up and shutdown for a period of five years and make such records readily available for District inspection upon request. [District Rule 4306] Federally Enforceable Through Title V Permit
- 25. Permittee shall keep weekly records of the sulfur content of the vapor recovery gas, amount of natural gas combusted, and the amount of vapor recovery gas combusted. [District Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 26. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rules 1081 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 27. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003) shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 28. The Regional Administrator shall be notified in writing within (15) days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in Section VIII of Federal Permit SJ 80-14 (as amended August 15, 2003). This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Section VIII of Federal Permit SJ 80-14 (as amended August 15, 2003), and the methods utilized to restore normal operations. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 29. The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local air pollution control agency, and/or their authorized representatives, upon the presentation of credentials, shall be permitted: A) to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003); and B) at reasonable times to have access to and copy any records required to be kept under the terms and conditions of Federal Permit SJ 80-14 (as amended August 15, 2003); and C) to inspect any equipment, operation, or method required in Federal Permit SJ 80-14 (as amended August 15, 2003); and D) to sample emissions from the source. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 30. In the event of any changes in control or ownership of facilities, Federal Permit SJ 80-14 (as amended August 15, 2003) shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of Federal Permit SJ 80-14 (as amended August 15, 2003) and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 31. The provisions of Federal Permit SJ 80-14 (as amended August 15, 2003) are severable, and, if any provision of amended Federal Permit SJ 80-14 is held invalid, the remainder of amended Federal Permit SJ 80-14 shall not be affected thereby. [PSD SJ 80-14] Federally Enforceable Through Title V Permit

- 32. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable Federal, State and local regulations. [PSD SJ 80-14] Federally Enforceable Through Title V Permit
- 33. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320]
- 34. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320]
- 35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]
- 36. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
- 37. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 38. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, stack gas velocities EPA Method 2, and stack gas moisture content EPA Method 4. [District Rules 1081, 4305, 4320 and 4351] Federally Enforceable Through Title V Permit
- 39. Permittee shall maintain records of fuel hhv and cumulative annual fuel use for a period of 5 years and shall make such records readily available for District inspection upon request. [District Rule 4351] Federally Enforceable Through Title V Permit





## **AUTHORITY TO CONSTRUCT**

PERMIT NO: S-1131-78-28 ISSUANCE DATE: 05/06/2013

**LEGAL OWNER OR OPERATOR: CHEVRON USA INC** 

MAILING ADDRESS: PO BOX 1392

BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL KERN COUNTY, CA

SECTION: SE29 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

MODIFICATION OF 62.5 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED C.E. NATCO STEAM GENERATOR (HSG# 60-69; DIS# 20610-79) WITH A NORTH AMERICAN MAGNA FLAME GLE LOW-NOX BURNER AND FLUE GAS RECIRCULATION (CANFIELD LEASE): TRANSFER OF LOCATION OF STEAM GENERATORS TO NW S 5. T 29S. R 28E AND UPGRADES TO CONVECTION AND RADIANT SECTIONS

### **CONDITIONS**

- 1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- 2. The operator shall fire the unit only on natural gas and vapor recovery gas that has a combined fuel sulfur content not exceeding 5 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
- 3. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 4. Emission rates shall not exceed any of the following limits: 0.108 lb-PM10/MMBtu; or 0.006 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Except during startup and shutdown, emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 50 ppmvd CO @ 3% O2 or 0.037 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

### CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

- 6. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,855 lb-NOx/year, 0.084 lb-CO/MMBtu, 55.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 8. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 9. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 10. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 11. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 12. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
- 13. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit

- 17. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rules 2520 and 4320] Federally Enforceable Through Title V Permit
- 21. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, stack gas velocities EPA Method 2, stack gas moisture EPA Method 4, PM10 EPA Method 5 (both filterable and condensible), SOx (lb/MMBtu) EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H2S) EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H2S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320]
- 24. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NOx and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration. [District Rules 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 27. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 28. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit

- 29. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 31. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 32. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
- 33. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]





## **AUTHORITY TO CONSTRUCT**

**PERMIT NO:** S-1131-877-21 **ISSUANCE DATE:** 05/06/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC

MAILING ADDRESS: PO BOX 1392

BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL KERN COUNTY, CA

SECTION: 04 TOWNSHIP: 29S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

MODIFICATION OF 62.5 MM BTU/HR STRUTHERS NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR #46 WITH FGR, NORTH AMERICAN MODEL GLE 4231 BURNER AND O2 CONTROLLER (CENTRAL PLANT): TRANSFER OF LOCATION OF STEAM GENERATORS TO NW S 5, T 29S, R 28E AND UPGRADES TO CONVECTION AND RADIANT SECTIONS

### **CONDITIONS**

- 1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit

#### CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

- 7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
- 8. The operator shall fire the unit only on natural gas, recovered vapors and gas from the vapor control system listed on PTO S-1132-8, S-1132-90, S-1131-903, S-1131-909 and S-1131-1040. The combined fuel sulfur content from these units shall not exceed 5 gr S/100 scf. [District Rules 2201, 4406, and 4320] Federally Enforceable Through Title V Permit
- 9. Steam generator shall be equipped with an operational gas volume flowmeter that measures the combined fuel gas and vapor recovery gas volume sent to the steam generator. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 10. Emission rates shall not exceed any of the following limits: 0.0768 lb-PM10/MMBtu or 0.003 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Except during startup and shutdown, emissions shall not exceed any of the following limits: 15 ppmvd NOx @ 3% O2 or 0.018 lb-NOx/MMBtu and 28 ppmvd CO @ 3% O2 or 0.021 lb-CO/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 12. Including startup and shutdown periods, maximum emissions from the steam generator shall not exceed any of the following limits: 0.1 lb-NOx/MMBtu, 54.0 lb-NOx/day, 9,855 lb-NOx/year, 0.084 lb-CO/MMBtu, 31.5 lb-CO/day, and 14,235 lb-CO/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Duration of startup or shutdown shall not exceed two hours each per occurrence. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically possible during startup and shutdown. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. Permittee shall maintain records of duration of each start-up and shutdown. Startup is defined as the period of time to reach operating temperature and pressure once fuel is supplied, including the time required by the emission control system to reach full operation. Shutdown is defined as the period of time taken from operating temperature and pressure until the fuel supply is completely turned off. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. The fuel combusted in this unit shall be tested monthly for sulfur content and higher heating value. If a fuel content test fails to show compliance, weekly testing is required until compliance is demonstrated for 8 consecutive weeks, after which monthly testing may resume. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 16. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. If the unit is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 2520, 9.3.2 and Rule 4320, 5.7.6] Federally Enforceable Through Title V Permit
- 18. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 2520, 9.3.2 and 4320, 6.2.1] Federally Enforceable Through Title V Permit
- 19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

- 20. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. Exhaust gas stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 23. Source testing shall be conducted using the methods and procedures approved by the District. Source testing for compliance demonstration shall be conducted by independent testing laboratories, and shall be witnessed, or authorized by the District personnel. Sample collection shall be by ARB certified testing laboratory. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 25. Permittee shall submit an analysis to the District demonstrating compliance with the fuel sulfur content and higher heating value within 60 days of startup and at least once every 12 months. The sulfur content and higher heating value of the fuel shall be determined using the test methods referenced in this permit or certified by a third party fuel supplier. [District Rule 4320] Federally Enforceable Through Title V Permit
- 26. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 27. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, stack gas velocities EPA Method 2, stack gas moisture EPA Method 4, PM10 EPA Method 5 (both filterable and condensible), SOx (lb/MMBtu) EPA Method 6C or 8 or ARB Method 100, or fuel gas sulfur content analysis (as H2S) EPA Method 11 or 15 or ASTM 6228 and (as total sulfur) ASTM D1072, D3246, or D6228, or grab sample analysis by double GC for H2S and mercaptans or GC FPTD/TCD performed in the laboratory, fuel hhv (MMBtu) ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 28. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 1081, 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

- 30. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4320] Federally Enforceable Through Title V Permit
- 31. Permittee shall maintain daily records of total combined volume of fuel gas and vapor recovery gas burned, the dates of any fuel type switching, the monthly NOx and CO emissions limit determinations, the sulfur content and higher heat value as determined by periodic analytical testing or fuel supplier invoices/certifications, and permit number(s) of systems providing gas for incineration [District Rules 2201, 2520, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 32. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 33. No less than 4.54 miles of roads shall be paved and maintained to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 34. Only hot mix asphalt of a type conforming to Caltrans Standard Specifications shall be used in the paving or maintenance of roads used to provide particulate matter offsets for Project 62 and 95. [District Rule 2201] Federally Enforceable Through Title V Permit
- 35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of District Rules 4201, 4301 and 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 37. Formerly S-1143-3.
- 38. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
- 39. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

# ATTACHMENT D

**Emissions Increases** 

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
ATC S-1127-69-31	0	0	0	0	0
ATC S-1131-78-28	0	0	0	0	0
ATC S-1131-877-21	0	0	0	0	0
TOTAL	0	0	0	0	0

.

# ATTACHMENT E

Application

5-1127-69-33

# S-1/31-78-29 9 -872-22 ECEIVED San Joaquin Valley Air Pollution Control District AUG 15 2013

www.valleyair.org

SJVAPCD Southern Region

# Permit Application For:

[ ] ADMINISTRATIVE AMENDMENT	[X] MINOR MODIFICATION	[ ] SIGNIFICANT MODIFICATION					
I. PERMIT TO BE ISSUED TO: CHEVRON	U.S.A., INC.						
2. MAILING ADDRESS:							
STREET/P O BOX: PO BOX 1392							
CITY BAKERSFIELD	STATE CA	9-DIGIT  ZIP CODE 93302					
3. LOCATION WHERE THE EQUIPMENT WILL	INSTALLATION DATE:						
STREET KERN RIVER HEAVY OIL SOURCE	CITY.	erote-consum					
4 SECTION TOWNSHIP	RANGE	and determined.					
4. GENERAL NATURE OF BUSINESS:							
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)							
Implementation of ATC S-1127-69-31, S-1131-78-28 and S-1131-877-21							
·							
6. TYPE OR PRINT NAME OF APPLICANT:		TITLE OF APPLICANT:					
TIMOTHY NISHIKUBO		Kern River Operations Supervisor					
7. SIGNATURE OF APPLICANT:	PHONE: ( 661 ) 654-7141  FAX: ( )						
	·	EMAIL: beckdl@chevron.com					
For APCD Use Only:							
DATE STAMP	FILING FEE RECEIVED : \$	CHECK#:					
	DATE PAID:						
	PROJECT NO: 5-1133418	FACILITY ID: S-1127					

# ATTACHMENT F

**Compliance Certification Form** 

RECEIVED

### San Joaquin Valley **Unified Air Pollution Control District**

### TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I.	TYPE OF PERMIT ACTION (Check appropriate box)					
[ ] [X]	SIGNIFICANT PERMIT MODIFICATION [ ] ADMINISTRATIVE AMENDMENT					
11	MPANY NAME: CHEVRON U.S.A., INC. FACILITY ID: S =1127					
1.	Type of Organization:[X] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership ] ] Utility					
2.	Owner's Name: CHEVRON U.S.A., INC.					
3.	Agent to the Owner: N/A					
II.	COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):					
	Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).					
Ser Park	Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis					
i	Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.					
	Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.					
l do	eclare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:					
Sig	gnature of Responsible Official Date					
	Timothy Nishikubo					
Na	ume of Responsible Official (please print)					
	Kern River Operations Supervisor					
Tie	tle of Responsible Official (please print)					

AUG 1 5 2013

SJVAPCD Southern Region

## San Joaquin Valley Unified Air Pollution Control District

### TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)	
]   SIGNIFICANT PERMIT MODIFICATION [ ] ADMINISTRATIV [X] MINOR PERMIT MODIFICATION AMENDMENT	E
COMPANY NAME: CHEVRON U.S.A., INC.	FACILITY ID: S =1131
Type of Organization:[X] Corporation [ ] Sole Ownership [ ] Government	[] Partnership [] Utility
2. Owner's Name: CHEVRON U.S.A., INC.	***************************************
3. Agent to the Owner: N/A	
II. COMPLIANCE CERTIFICATION (Read each statement carefully and initia	al all circles for confirmation):
Based on information and belief formed after reasonable inquiry, the equipolation continue to comply with the applicable federal requirement(s).	pment identified in this application will
Based on information and belief formed after reasonable inquiry, the equipolation comply with applicable federal requirement(s) that will become effective of	
Corrected information will be provided to the District when I become awa information has been submitted.	are that incorrect or incomplete
Based on information and belief formed after reasonable inquiry, informat application package, including all accompanying reports, and required cer complete.	
I declare, under penalty of perjury under the laws of the state of California, that the	forgoing is correct and true:
Signature of Responsible Official Date	<del>ala da da francisco de la constanción de</del>
Timothy Nishikubo	
Name of Responsible Official (please print)	
Kern River Operations Supervisor	
Title of Responsible Official (please print)	